



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,919	06/20/2003	Yasuo Furukawa	02008.113001	6910
22511	7590	01/13/2005	EXAMINER	
OSHA & MAY L.L.P. 1221 MCKINNEY STREET HOUSTON, TX 77010			NGUYEN, VINH P	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/600,919	Applicant(s) FURUKAWA ET AL.	
	Examiner VINH P NGUYEN	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 9-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-8 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0104</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2829

1. Applicant's election without traverse of species of figure 1 in the reply filed on 11/19/04 is acknowledged.

2. Claims 9-21 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/19/04.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

4. The abstract of the disclosure is objected to because legal phraseology such as "means" is used. Correction is required. See MPEP § 608.01(b).

5. Claims 2-3 are objected to because of the following informalities:

In claim 2, it is unclear what "means for changing a signal level" and what does it comprise.

In claim 3, it is unclear what "means for changing a frequency of said overlaid signal" and what does it comprise.

Appropriate correction is required.

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of "means for changing a signal level" as recited in claim 2, "means for changing a frequency of said overlaid signal" as recited in claim 3 and "said electronic device comprises a plurality of semiconductor devices" as recited in claim 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1,4-~~8~~ are rejected under 35 U.S.C. 102(b) as being anticipated by Yamagishi (Pat # 6,246,248).

As to claim 1, Yamagishi discloses an apparatus as shown in figure 1 having a power source unit (13,14) for supplying a source voltage of direct current to an electronic device (DUT), a detecting unit (3,170) for detecting a source current with which the electronic device (DUT) is supplied by the power source unit (13,14) and a judging unit ((171,172,173,174,16,11) for judging the quality of the electronic device (DUT). It is noted that the power source unit comprises "means (programmable voltage generation source "13") for overlaying an overlaid signal (an output control signal of the source "13" connected to the power supply (14)) with a predetermined period on the source voltage.

As to claim 4, it appears that the judging unit of Yamagishi judges the quality of the electronic device (DUT) on the basis of a difference between a source current supplied current to the DUT and the detected current from the detecting unit (3,170).

As to claim 5, it also appears that the judging unit of Yamagishi also judges the quality of the DUT on basis of a difference between a spectrum of a source current supplied to the DUT and the detected current from the detecting unit (3,170)

As to claim 6, it appears that the judging unit (171,172,173,174,11,16) judges the quality of the DUT on basis of a magnitude of frequency component of the source current detected by detecting unit (3,170).

As to claim 7, Yamagishi also discloses a pattern generator (12) for providing a test pattern to the DUT and wherein the judging unit judges the quality of the DUT on basis of the source current detected by the detecting unit (3,170) .

As to claim 8, Yamagishi discloses electronic device (DUT) as an integrated circuit connected to a pattern generator (12). It appears that an integrated circuit (DUT) would include a plurality of semiconductor devices and since the DUT connected to the Pattern generator (12), these semiconductor devices receives the test pattern at once.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakano et al (Pat # 5,481,551) disclose IC element testing device.

Spica (Pat # 6,717,428) discloses method and apparatus for detecting defects in a circuit using spectral analysis of transient power supply voltage.

Eldridge et al (pat # 6,339,338) disclose an apparatus for reducing power supply noise in an integrated circuit.

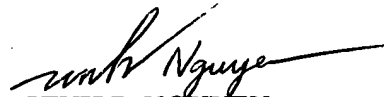
Hanajuma (Pat # 6,414,507) disclose device testing system.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P NGUYEN whose telephone number is (571)-272-1964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2829

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



VINH P. NGUYEN  
PRIMARY EXAMINER  
ART UNIT 2829

01/07/04